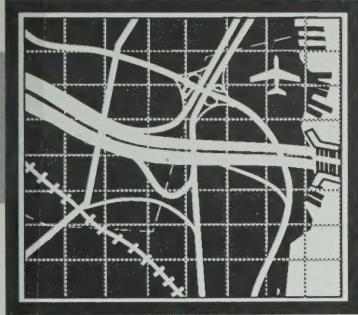


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New Jersey Department of Transportation
1990 Annual Report

The New Jersey Department of Transportation

1990 Annual Report

**Governor Jim Florio
Commissioner Tom Downs**





THOMAS M. DOWNS
COMMISSIONER

STATE OF NEW JERSEY

DEPARTMENT OF TRANSPORTATION

1035 PARKWAY AVENUE

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TRENTON, N.J. 08625

609-530-3535

Dear Governor Florio:

During the past year, you established a framework for meeting the challenges and opportunities of the new decade. At the forefront of the agenda is addressing the economic realities of the 1990s.

Our future success is dependent on a healthy and thriving economy. By confronting today's economic challenges and planning for the future, we will provide New Jersey with the competitive edge it needs to be successful in this decade and throughout the 21st century. In the long term, transportation investments will help guarantee that New Jerseyans continue to enjoy a high quality of life for many years to come. In the short term, transportation investments will provide badly needed jobs for our citizens despite the national recession. For these reasons, you have actively supported legislation to lift the appropriations cap from the Transportation Trust Fund.

During 1990, the Department of Transportation guided the development of a statewide blueprint for meeting our transportation needs. The urgency of preparing such a plan becomes more evident every day. While financial resources at the federal, state and local levels continue to shrink, transportation investments must be made today to ensure New Jersey's economic competitiveness in the global economy.

In the past, the Department and the state's other transportation authorities and agencies made investment decisions independently of each other and without coordination. The luxury to allow such decision-making to continue no longer exists. We must get the most out of every investment. For this reason, in June you created the Transportation Executive Council consisting of the chairs of each of the major agencies and several key cabinet members. For the first time in the history of the state, the transportation community was called upon to develop an integrated, statewide transportation investment plan.

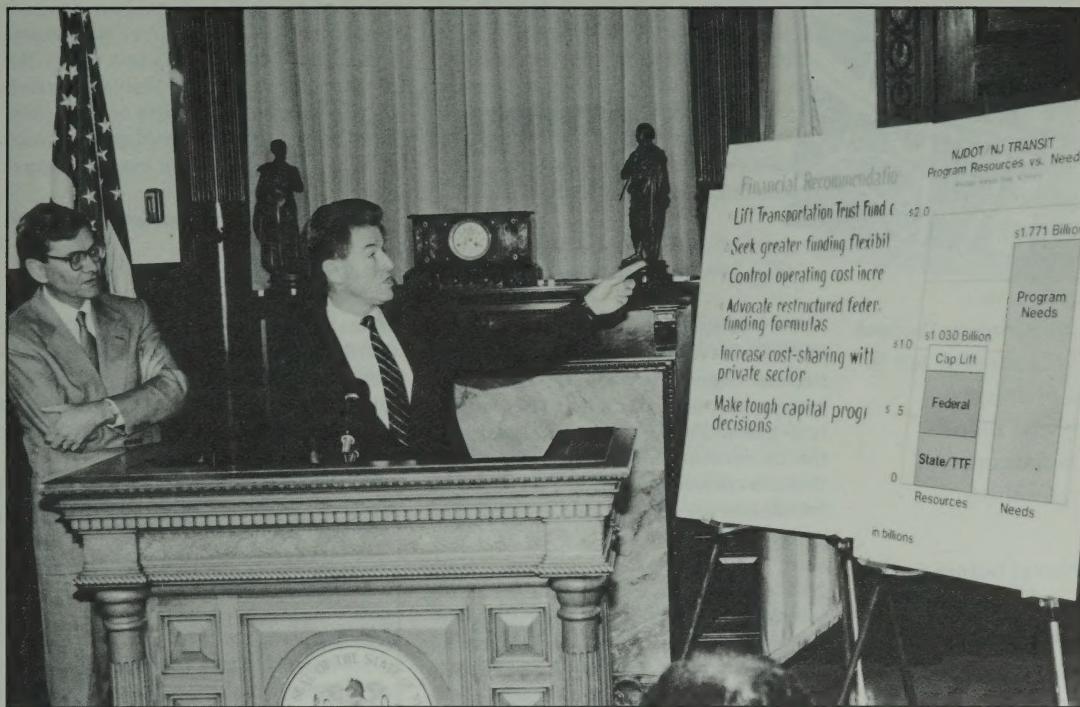
Responsibility for the leadership of the Council and the accomplishment of these goals rests with the Department. It became our task to forge the plans and goals of all of New Jersey's transportation agencies into a unified network of operations and investments.

I am pleased to present you with this report of the Department's first steps toward the goals that you spelled out so clearly when you took office and other highlights of the Department in 1990.

Yours truly,

Tom Downs

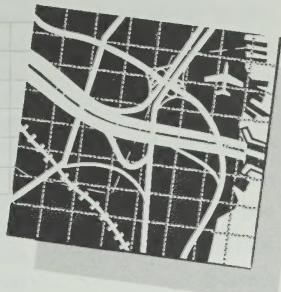
Thomas M. Downs
Commissioner of Transportation



Governor Jim Florio announces the first recommendations of the Transportation Executive Council which is chaired by Commissioner Tom Downs.

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Framing the 1990s

Never before in the history of the state have the agencies worked collectively on a statewide vision.

A strong, reliable transportation network is vital to the state's economic success. Highways, a sound public transit system, airports, ports and railroads all help guarantee the delivery of goods and the movement of New Jersey's citizens that are critically important if the state's businesses are to continue to grow and prosper.

To ensure that New Jersey stays on the competitive edge of a widening global economy, and that we get the greatest possible return out of every investment dollar, Governor Jim Florio called on all of the state's transportation agencies to prepare an integrated, statewide transportation investment plan. Never before in the history of the state have the agencies worked collectively on a statewide vision.

Establishing the Council, Governor Florio said, "Up to now, the only thing that's been consistent about New Jersey's transportation policy has been a lack of consistency. Groups that should be working together for the good of all have been acting like sovereign nations — accountable to no one. The Transportation Executive Council will set an action agenda for the entire state."

With the Department of Transportation providing staff support, work on the agenda began with a series of summer meetings among the state's transportation professionals, as well as with representatives of each of New Jersey's 21 counties and the seven largest cities. Provided with the information that came out of these sessions, in September the Council presented the Governor with its policy statement, *The Decision-making Framework for Transportation in the 1990s*.

Serving as a guide for all future transportation decisions and recommendations to the Governor, the *Framework* was a major departure from past transpor-

tation policy. It represented the first time that the agencies have agreed upon a common set of policies, and the first time that investments would be used not only to maintain the network but also to leverage economic competitiveness.

In setting the policies, the Council pledged that future decisions and investment recommendations would:

- Make system preservation the top priority;
- Attack congestion;
- Lead and shape investment;
- Capture a larger share of global gateway commerce;
- Enhance tourism;
- Use transportation investments to tap a larger labor pool;
- Invest in connections that improve the network's service;
- Move more people, not more vehicles;
- Integrate transportation and environmental goals; and
- Improve planning coordination with county, local and private interests.

Possibly for the first time, goods movement, especially global gateway commerce, and tourism, including expansion of the Atlantic City market, were identified as high priority transportation investment targets for the coming decade.

Following the publication of the policy statement in *Framework*, the Council presented three reports to the Governor in October, November and December that included specific regional recommendations. A fourth report on strategies for the state's goods movement industries is due to be issued in early 1991.

These recommendations are the first of what is expected to be an ongoing

decision-making and recommendation process. In early 1991, Governor Florio will select and prioritize the recommendations that will form the basis of a statewide plan of action to be pursued in the coming years by all of New Jersey's transportation agencies.

Southern New Jersey

For southern New Jersey, the Council's recommendations focused on enhancing tourism opportunities, especially those of Atlantic City, and providing the infrastructure needed for the whole region's economic growth and expansion. The recommendations included:

- Consolidating the region's transportation services, including operation of the Atlantic City Airport, in a South Jersey Transportation Authority;
- Transferring the Tacony-Palmyra Bridge to the Delaware River Port Authority and the Burlington Bristol Bridge to the Delaware River Joint Toll Bridge Commission, and implementing one-way tolls for the Delaware River bridges;
- Connecting Route 130 with the Turnpike, the Atlantic City Expressway with the Turnpike and Route 30 with the Atlantic City Expressway;
- Initiating a planning effort for recreational travel;
- Integrating multi-agency traffic management to decrease congestion and improve regional traffic flow;
- Expanding highway capacity on Routes 30, 40, 70 and 73; and
- Exploring joint ticketing options for transit and providing transit services to accommodate the "reverse commute" in suburban areas.

Northern and Central New Jersey

For the northern and central sections of the state, the primary focus of the recommendations was attacking conges-

tion through improving connections in existing transportation systems, use of rush hour priority lanes and traffic management strategies. For example, the Council called for:

- The Turnpike to advance Route 92 and its Hightstown bypass connection;
- The Garden State Parkway to improve connections to I-80 and I-78;
- The Department to advance and complete Route 129 and the Trenton Complex; and
- The Port Authority of New York and New Jersey and NJDOT to jointly develop a fast-response traffic management program for the I-80/Routes 46 and 10/Cross Bronx Expressway corridor.

To further ease congestion, the Council identified locations along I-80 and I-287 for the establishment of priority travel lanes. Dedicated to buses, carpools and vanpools, the lanes would increase capacity and improve flow during rush hours.

Other recommendations included selective widening and capacity improvements on Routes 15, 33, 70 and 206 and advancement of the Somerville Circle elimination and Flemington bypass.

Northeastern New Jersey

For northeastern New Jersey, the Council focused on preserving and improving the region's transportation network, which is one of the most complex and heavily traveled systems in the world. A gateway to the rest of the nation and world, the region is an important link to the economic vitality of the northeastern United States. To guarantee that this region's network continues to meet the daily needs of the millions of residents, commuters, employers and interstate travelers, the Council presented recommendations to renew the aging infrastructure, make important transit connections, move more people in fewer vehicles and selectively lead development.

The Council recommended consolidating the region's transportation services, including operation of the Atlantic City Airport, in a South Jersey Transportation Authority.

A gateway to the rest of the nation and world, the region is an important link to the economic vitality of the northeastern United States.

The recommendations included:

- Advancing key rail connections, such as the Kearny Connection, Secaucus Transfer, Newark Airport transit link, the Bergen Arches Transitway, the Waterfront Connection and an interim busway along the waterfront;
- Encouraging further transit use by exempting regularly scheduled commuter buses from tolls and related fees, and discouraging single passenger travel by discontinuing the Port Authority's commuter discount policy;
- Expanding critically needed roadway capacity by one lane in each direction on the Turnpike between Interchanges 11 and 14 through widening, and on the Garden State Parkway between Interchanges 129 and 137 through restriping;
- Preserving the expanded capacity for high occupancy vehicles by implementing priority travel lanes during rush periods on the Turnpike between Interchanges 8A and 14;
- Managing highway demand on the Turnpike, Parkway and Routes 1&9 with a "smart highway" system, using variable message board signs, radios, loop detectors, computerized signaling and ramp metering;
- Developing a single compatible electronic toll collection system to decrease delays on the state's toll roads; and
- Advancing improvements on Routes 1, 1&9, completing Routes 169 and 185, and building Liberty State Park Turnpike ramps and a Turnpike interchange at the Secaucus Transfer.

The Transportation Executive Council

Atlantic County Transportation Authority

Burlington County Bridge Commission

Cape May County Bridge Commission

Delaware River and Bay Authority

Delaware River Joint Toll Bridge Commission

Delaware River Port Authority

NJ Department of Commerce and Economic Development

NJ Department of Environmental Protection

NJ Department of Transportation

NJ Expressway Authority

NJ Highway Authority

NJ TRANSIT

NJ Turnpike Authority

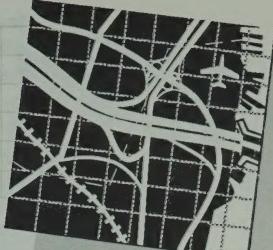
Office of the Governor

Office of the State Treasurer

Palisades Interstate Park Commission

Port Authority of New York and New Jersey

Investing in the future



Transportation capital investments pay dividends to the citizens of New Jersey today and tomorrow. By investing in our infrastructure, we guarantee that business will have the foundation it needs to grow and prosper for many years to come. In the immediate future, particularly during slow economic times, transportation investments can also act as a catalyst to spur growth and create much needed jobs.

During 1990, Governor Florio provided the Department with the tools needed to prime the pump of the state's economy in 1991, as well as to address many of the state's long-term transportation needs. He worked with legislative leaders to introduce legislation to lift the appropriations cap on the Transportation Trust Fund (TTF), a recommendation originally proposed by the Transportation Executive Council.

Created by the legislature in 1984, the TTF supports the capital programs of the Department and NJ TRANSIT. In 1988 the Legislature limited the TTF's yearly appropriations to \$365 million, which has resulted in a backlog of projects and unused bonding capacity available through the Fund. Bonding would provide resources without the need for additional state revenue.

Lifting the cap will mean that a number of transportation projects now sitting on the shelf will be advanced to construction and, at the same time, boost the economy. For every \$100 million that is spent on transportation projects, 3,700 jobs are created and \$42 million in immediate economic benefits are realized, according to a recent study completed by The Road Information Program (TRIP), a nonprofit highway research group. The study determined that the economic returns would include \$11.7 million in cor-

porate taxes and fees, \$10 million in property, sales and other taxes, and \$11.5 million saved in unemployment compensation.

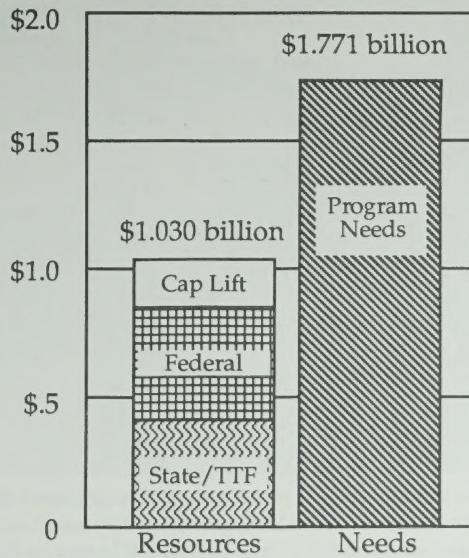
Because of the recent slowdown in the economy, New Jersey's transportation investments will be stretched even further. With construction bids coming in at 5 to 25 percent below estimate during 1990, the state is guaranteed to get even more for every dollar it spends.

In addition to the cap lift, the Governor also worked with legislative

Governor Florio provided the Department with the tools needed to prime the pump of the state's economy in 1991.

NJDOT / NJ TRANSIT Program Resources vs. Needs

Average Annual Over 4 Years



**The Department
and NJ TRANSIT
are ... facing a
four-year gap of
nearly \$1 billion.**

leaders to introduce a bill allocating \$90 million from the 1989 Bridge Rehabilitation Bond Issue. Approved by voters in 1989, the funds will be used to rehabilitate and repair state, county, local and "orphan" bridges, of which nearly 30 percent are structurally deficient or functionally obsolete statewide. Again, these projects will result in a needed economic boost and jobs, and in the long term, provide a sound, reliable infrastructure for future growth.

The recommendation to lift the appropriations cap resulted from a financial assessment completed by the Transportation Executive Council. While its policy recommendations will ensure that New Jersey gets the most from its resources through better coordination and long-term planning, the Council found that the state's needs far exceed available resources. In meetings with county and municipal leaders, the Council learned that over the next five years local transportation needs will surpass resources by \$2.5 billion. The Department and NJ TRANSIT are in a similar position facing a four-year gap of nearly \$1 billion. This is exacerbated by the tight fiscal climate, declining resources and an infrastructure that is aging faster than it can be repaired.

Confronting these challenges and accomplishing the Council's ambitious agenda will require a new level of financial flexibility and co-

operation among the state's transportation agencies and authorities.

At the federal level, the Department will continue to advocate restructured federal funding matching formulas in Congress's reauthorization of the Surface Transportation Assistance and Relocation Act. In an effort to begin to address the financial issues, the Council recommended lifting the Trust Fund cap and the following financial policies:

- At the federal level, seeking greater flexibility between funding sources and the various capital programs;
- Controlling operating cost increases for all agencies;
- Increasing cost-sharing of transportation projects with the private sector.

Furthering these efforts is the Governor's requirement that each of the state's transportation agencies, including the Department and NJ TRANSIT, prepare business plans. Each of the plans will be studied in the coming year from a coordinated capital planning perspective and to identify any outstanding environmental issues.

While 1990 was dedicated to preparing the financial tools, the coming year will be dedicated to delivering an expanded capital program and pursuing the Council's long-term financial recommendations to provide transportation with a more solid financial foundation.

Getting the job done



The timely delivery of long-awaited, much-needed transportation improvements on all modes is a source of pride to the Department. This year NJDOT accelerated projects, some of which have been backlogged for decades to take advantage of an economic environment that is favorable to low bid prices. More projects ready for bid, in turn, mean more jobs. More people working will, of course, boost the state's overall economic health.

The Department's ability to complete preliminary planning, design and engineering results in contracts it awards for new work. Thanks to the Transportation Trust Fund, more than \$1 billion in highway and bridge construction was under way in 1990.

Projects completed or continuing on schedule totalled \$123.2 million

This year the \$36.3 million reconstruction of 1 & 9, Newark, was completed after three years. Routes 1 in New and South Brunswick, 18 in New Brunswick, Middlesex County; 31 in Pennington, Mercer County; 33 in Monroe, Middlesex County, and 35 in Wall Township, Monmouth County, were all resurfaced ahead of or on schedule.

The \$1.7 million bridge resurfacing of Route 3 in Clifton, Passaic County, was completed on schedule as was the \$1.8 million bridge rehabilitation on Route 23 in West Milford, Passaic County.

Motorists on Route 34 in Matawan, Monmouth County, appreciated the \$4.2 million reconstruction, grading, paving and structural improvements that were completed five months ahead of schedule. The \$2.4 million Route 46 reconstruction, grading, paving, and structures work in Ridgefield Park, Bergen County, and the \$15.4 million I-80 bridge reconstruction from Knowlton, Warren County, to Mt. Olive, Morris County, were also

completed well ahead of schedule.

The \$539,000 resurfacing of Route 73 in Winslow Township, Camden County; the \$466,000 intersection revisions on Route 94 in Vernon, Sussex County; the \$334,000 Routes 130 & 206 bridge reconstruction in Bordentown, Burlington County; the \$7.9 million reconstruction, grading, paving and structures project on Routes 130 & 33 in East Windsor, Mercer County, were all completed or continued on or ahead of schedule.

Also completed early or continuing on schedule were the \$263,000 I-280 rock slope stabilization in West Orange, Essex County; the \$404,000 Bordentown

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In a record-breaking 60 days, the Route 15 bridge over Paulins Kill in Lafayette, Sussex County, reopened on November 5. The bridge was rebuilt on one of the Department's tightest schedules. It had been evaluated as structurally deficient and functionally obsolete and would have been closed if not reconstructed on time.

Avenue Bridge demolition in South Amboy, Middlesex County, the \$2.5 million County Route 616 reconstruction, grading, paving and drainage work in Sparta, Sussex County; \$3.2 million of intersection improvements and traffic signals in Fort Lee, Bergen County; and \$2.3 million in intersection improvements in Camden.

Other 1990 projects completed ahead of schedule included the \$110,000 crack sealing work in Region 2 and the \$2.4 million reconstruction, grading, paving and structural improvements on the Palisades Interstate Parkway in Englewood Cliffs, Bergen County. The \$232,000 resurfacing in High Point State Park in Sussex was finished on schedule.

Other completions this year included the \$9.2 million 14th Street viaduct reconstruction in Union City and Hoboken in Hudson County. The \$26.8 million Route 169 grading, paving and structures project in Hudson County; the \$4.9 million I-195 safety improvement project in Mercer and Ocean Counties; the \$3.5 million I-280 resurfacing in Parsippany-Troy Hills, Morris County; the \$98,000 I-295 drainage project in Haddon Heights, Camden County; the \$584,000 Elmer-Hardingville Bridge reconstruction in Upper Pittsgrove, Salem County, and the \$2.6 million in general improvements in Hudson County also continued or were completed.

New contracts awarded

Some of the construction highlights for 1990 included contract awards of more than \$88 million for bridge replacement and rehabilitation on the state and local road system, \$66 million for completion of the interstate highway network and almost \$170 million worth of improvements to the existing state highway system. Another \$65 million was provided to counties and municipalities for 350 transportation projects on their road and street systems.

Before the federal Surface Transportation Assistance and Relocation Act expires next fall, the Department will be authorized to advertise approximately \$400 million worth of contracts to complete the interstate network statewide.

Reflecting the Transportation Executive Council's policy of preserving the

existing transportation system, many of the Department's construction awards in 1990 focused on system preservation and rehabilitation of existing bridges and roads.

Not always "big ticket" items, these projects are nonetheless critical to the mobility of the state. Sometimes they can be literally life-or-death issues to municipalities bisected by substandard bridges unable to bear the weight of fire or rescue vehicles.

System preservation: bridges

Included in the system preservation category were major bridge rehabilitation projects such as the \$62 million replacement of the Route 147 bridge in Cape May County; the \$4.3 million replacement of the Main Street bridge over Deal Lake, Monmouth County; the \$3.3 million replacement of Major Road bridge in Middlesex County; the \$2.5 million replacement of the North Main Street bridge over NJ TRANSIT, Morris County; the \$1.8 million rehabilitation of the Route 23 bridge over the Pequannock River in Passaic and Morris Counties.

Other bridge rehabilitations or replacements included the \$1.1 million rehabilitation of Bay Street bridge over NJ TRANSIT in Essex County; the \$1 million rehabilitation of the Williamsburg Avenue bridge; \$2.8 million for painting 15 bridges on Route 55 in Cumberland County, 11 bridges on I-295 in Gloucester and Salem Counties and 10 bridges on I-287 in Somerset County; \$105,000 for rehabilitation of the Routes 1&9 bridge over St. Paul's Avenue and Conrail in Hudson County; \$738,00 for the rehabilitation of the Route 28 bridge over I-287 and of the Flagtown Road bridge in Somerset County; the \$1.3 million replacement of the Route 23 bridge over Franklin Lake and the \$798,000 rehabilitation of Wildcat Road bridge over the Wallkill River in Franklin, Sussex County; the \$773,670 rehabilitation of the bridge over Pohatcong Creek in Warren County.

System preservation: highways

Major roadway resurfacing and reconstruction projects were awarded on I-80 in Bergen County (\$4.2 million) and Route 47 in Cape May and Cumberland Counties (\$8.1 million).

**More projects ready
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Workers construct a bridge deck on Route 18 in Monmouth County.

Projects statewide included:

- Routes 35, 130,
- Middlesex, Monmouth, \$1.8 million;
- Route 3, Passaic, \$1.7 million;
- Route 46/Baldwin Rd., Morris \$1.6 million;
- Route 9, Cape May, \$1.5 million;
- Routes 202/206, Somerset, \$1.2 million;
- Route 35, Monmouth, \$1.2 million;
- Route 35, Monmouth, Middlesex, \$769,000;
- Route 52, Atlantic, Cape May, \$695,000;
- I-80, Morris, \$655,000;
- Route 73, Camden, \$584,000;
- Route 33, Camden, \$313,000;
- Route 206, Sussex, \$224,000.

System preservation: NJ TRANSIT

The \$89 million in Transportation Trust Fund dollars provided to NJ TRANSIT enabled the statewide public transit agency to continue to provide safe, convenient and efficient bus and rail service to 292,000 daily riders in Fiscal Year 1990. NJ TRANSIT's bus and rail services operate in 20 of the 21 counties in the state of New Jersey, and serve New York and Philadelphia as well. Transportation Trust Fund dollars provided NJ TRANSIT were once again used to match more than \$200 million in available federal capital funds.

NJ TRANSIT allotted \$66 million for rail infrastructure projects to continue

upgrading track, bridges and signal and communications systems on its 12 commuter rail lines. These projects are critical to the continued safe and efficient operation of the commuter rail system which serves approximately 83,000 riders daily.

Another \$144 million went for the acquisition of 50 new Comet III model passenger rail cars and 15 electric locomotives. A portion of these dollars was added to the funding available for the rehabilitation of diesel locomotives and the overhaul of the Arrow III electric rail cars — a major project which was contracted in Fiscal Year 1989. These cars are used primarily on the heavily travelled Northeast Corridor which operates between Trenton and New York.

In addition, \$40.4 million was used to rehabilitate the Newton Avenue Bus Complex in Camden, to construct the Newark Bus Complex and Meadowlands Bus Maintenance Facility and to acquire land and design the Atlantic City Bus Maintenance Facility. These projects will upgrade and/or replace existing obsolete maintenance facilities and ultimately provide NJ TRANSIT with updated facilities to maintain the significant public investment in its bus fleet.

Private carriers received \$2 million for operations support equipment as part of the continuing private carrier capital improvement program. NJ TRANSIT provides capital assistance (buses, heavy maintenance equipment, computers, etc.) to more than 130 private

Trust Fund dollars enabled NJ TRANSIT to continue to provide safe, convenient and efficient bus and rail service to 292,000 daily riders.

carriers operating in New Jersey.

NJ TRANSIT also tagged \$5.6 million for the rehabilitation of rail stations and purchase and installation of bus stop signs, shelters and information signs and displays which make the public transportation system more easily accessible and

comfortable for its riders.

Funds were used to start canopy and platform reconstruction at the Broad Street station in Newark and to complete pedestrian tunnel liner repairs at the New Brunswick rail station and general repairs to the Paterson rail station.

NJ TRANSIT

at a Glance

Daily passengers	292,000
Annual passenger trips	170.4 million
Annual bus passenger trips	126.6 million
Annual rail passenger trips	41.8 million

Bus Operations

Routes operated in New Jersey	154
Annual route miles operated	73 million
Buses operated by NJ TRANSIT	1,863
Carriers subsidized	5
Private carriers receiving buses	134
Buses leased to private carriers	935

Rail Operations

NJ counties served (12 lines)	14
Annual passenger miles	980.1 million
Route miles operated	394.1 miles
Rail cars in service	657
Daily revenue trains operated	650
Locomotives operated	90
Rail stations with service	160



The Trust Fund enabled NJ TRANSIT to purchase 15 new electric locomotives.

Capacity/safety improvements: highway

This year's contracts for construction on new alignments included \$15.7 million for I-287, Bergen County, and \$50.5 million to extend I-295 in Burlington and Mercer Counties, both critical interstate connections for New Jersey and the Northeast.

Another new alignment was a \$49 million contract on Route 24 from I-287 to the Columbia Turnpike in Morris County.

Additional capacity/safety improvements on existing roads included:

- Route 87/187 widening, resurfacing and reconstruction, \$11.9 million, Atlantic County;
- Route 17/Lake Street overpass, \$5.8 million, Bergen County;
- I-80 collector/distributor road and ramp rehabilitation, \$8.6 million, Bergen County;
- Route 18, \$8.9 million, Middlesex County;
- Route 130, \$328,000 for left-turn slots and safety improvement, Burlington County;
- Route 206, \$315,000 for a jughandle, Mercer County;

- Route 72, \$884,000, widening, Stafford Township, Ocean County;

- Route 46, \$327,000, widening and resurfacing, County Route 519 intersection, White Township, Warren County.

Capacity/safety improvements: airports

In addition to its highway, bus inspection and rail freight programs, the Department increased its support of general aviation initiatives statewide.

In 1990 the Department awarded \$540,000 in Airport Safety Fund grants which were matched by \$5,700,000 in Federal Aviation Administration funds for safety and capacity improvements at 12 New Jersey general aviation airports: Red Lion, R. J. Miller, Millville, Camden County, Essex County (2), Lincoln Park, Marlboro, South Jersey Regional, Cape May County, Teterboro, Woodbine (2), Morristown.

The Department also formed an Aviation Advisory Council to provide advice on general aviation problems. It consists of representatives of the aviation community, aviation users and local, county and state governments.

...Aviation Advisory Council to provide advice on general aviation problems.

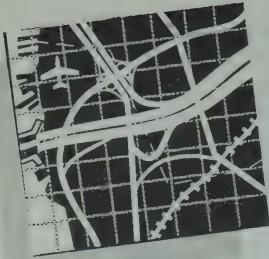
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NJDOT Maintenance Facts

Lane miles	10,466
Bridges: Fixed	2,276
Draw	31
Acres mowed by NJDOT	32,486 Acres
Litter pickup by NJDOT	183,653 Hours
Litter pickup, inmate program	186,033 Hours
Permanent patching	18,311 Tons
Temporary patching	5,005 Tons
Winter de-icing materials	71,125 Tons
Machine sweeping	10,948 Miles
Drainage pipe & underdrain installed	2,349 Lin. Ft.
Guiderail repair	41,769 Lin. Ft.
Signs replaced	16,908
Signs erected	4,317
Lines marked (restriped)	4,267 Miles
Resurfacing, force account	140,848 Tons
Traffic signals revised	411
Lighting units upgraded	950
Signals inspected	13,908
Traffic signal intersections relamped	1,747
Drawbridge openings	40,432
Electrical emergency calls	12,327
Skid tests	2,500 Lane Miles
Access permit applications issued	3,694
Access permit applications received	4,365
Dams inspected	3



NJDOT maintenance crew sorts litter for recycling.



Developing alternatives

This year the Department advanced and initiated several successful alternatives that are beginning to solve old problems.

Traditional solutions sometimes just don't work. They can be too expensive or extensive to be responsive, economic and effective. This year the Department advanced and initiated several successful alternatives that are beginning to solve old problems. They include less expensive and more efficient techniques, new connections between existing transportation modes, public/private partnerships and work methods that will improve the quality of the environment.

Cost- and time-savers

Since the value engineering unit was instituted in the Department in 1988, it has saved the state millions of dollars. The special unit reviews the proposed design, methods of construction and materials specified for a specific construction project to make recommendations on how to cut costs without sacrificing quality. This enables the Department to stretch

state dollars when the major part of a project is paid for by federal dollars. Value engineering examines projects that are still in design to help ensure that the design represents the most cost-effective and practical alternative.

One recommendation from this unit could save an estimated \$13 million when construction gets under way on two interstate rehabilitation projects. In another, recycling the concrete slabs removed from I-78 for use as roadway sub-base on another project will save an estimated \$1.5 million and eliminate the solid waste that would have gone to a landfill.

The Department also stepped up its use of technology to save time and money. For example, increased use of computer-aided drafting and design shortens time spent in plan production and retrieval that, in turn, will significantly reduce the cost of developing a project and evaluating alternatives.

Governor Jim Florio called on citizens to reduce highway congestion by making greater use of public transit, carpools and vanpools.



Congestion busters: Alternatives to the single passenger automobile

The Department is breaking away from the traditional means of attacking congestion, one of New Jersey's major transportation problems. While keeping the traditional solution, adding travel lanes, to a minimum, the Department is increasing its reliance on alternatives such as ridesharing, rush hour priority lanes, and traffic demand management. Efforts continue to reduce the 69 billion vehicle miles traveled on highways in this state each year, much of it in single passenger vehicles, making New Jersey the most heavily traveled state in the nation. Congestion problems include negative impacts on air quality and fuel conservation, the latter aggravated further by the Persian Gulf crisis.

This year NJDOT laid the groundwork to move traffic more efficiently on the highways that access the Hudson River crossings. The system, called "Magic," to be designed in 1991, will monitor traffic and provide guidance to motorists through the use of variable message signs.

1-800-626-RIDE, a toll-free hotline number for information about forming carpools and vanpools and bus and train schedules, was introduced in September, the month designated by Governor Florio to promote ridesharing. As part of the public campaign, NJ TRANSIT distributed brochures to motorists at the Hudson River crossings to encourage them to ride public transit instead of driving. September 26 was targeted as Alternative Commute Day. Governor Florio called on residents to join him in using public transit that day.

The NJDOT announced matching grants of up to \$200,000 for the establishment and continued support of Transportation Management Associations (TMAs) which promote car- and vanpooling in the private sector. A grant of \$155,000 was made to the Cross County Connection (CCC), a TMA serving Burlington and Camden Counties. The CCC is the first TMA in South Jersey and organizes vanpool services in member communities of Cherry Hill, Mount Laurel, Evesham, Moorestown, Maple Shade and Voorhees.

In addition, for the first time, in

1990 New Jersey announced a vanpool subsidy as part of the effort to reduce traffic congestion resulting from a major construction project. The program will serve commuters using I-80 in Morris County and will run through 1991. It offers discounts for the first six months of travel to commuters who join vanpools formed by MC RIDES, the Morris County TMA, which received \$120,000 for the project. Through its ridesharing program, MC RIDES has removed 2,494 cars from the road since 1987.

Three low frequency radios were installed in Allamuchy, Wayne and Livingston allowing motorists travelling through the I-80 construction area to tune in for the latest construction bulletin and, if possible, adjust their travel plans to avoid delays.

NJ TRANSIT allocated \$1.5 million of Transportation Trust Fund dollars for the purchase and distribution of 57 vehicles to 48 non-profit organizations around the state which serve the senior citizen and disabled communities. These vehicles included 15-passenger minibuses, regular sized vans and 28 mid-sized passenger buses to transport these citizens to shopping, doctor's visits and other destinations. In all, the 21 county paratransit systems provided about 3.8 million trips in Fiscal Year 1990.

Three of the organizations that received vehicles included the Burlington Occupational Training Center, the Jersey Cape Diagnostic Center in Cape May and the Highland Workshop/Easter Seal Workshop in Franklin.

Ferries, formerly a regular commuter travel mode, are making a comeback as a "new" solution to trans-Hudson congestion. Commissioner Downs released the findings of the Hudson River Waterfront North-South Ferry Study in April. Undertaken jointly by the NJDOT and NJ TRANSIT's Hudson River Waterfront Transportation Office, it provides a framework for future decisions about where and how the state should promote waterborne commuter alternatives. Three potential routes were identified as the most promising for future service: Staten Island-Exchange Place, Bayonne/Staten Island-Exchange Place, Exchange Place-Hoboken Terminal-Lincoln Harbor-ARCORP.

The NJDOT announced matching grants of up to \$200,000 for the establishment and continued support of Transportation Management Associations (TMAs) which promote car- and vanpooling in the private sector.

NJ TRANSIT's Hudson River Waterfront Transportation Office, in cooperation with the Port Authority of New York and New Jersey (PANYNJ), has begun a further analysis of the Staten Island-Exchange Place corridor. This analysis will define costs, assess terminal potential and probable environmental reviews and suggest ways to interest private operators.

This year the Department moved not only to decrease current congestion but also to preserve mobility on highways in the future.

Preserving mobility

This year the Department moved not only to decrease current congestion but also to preserve future mobility on highways. For example, taking steps to include transportation planning in preparation for new development to prevent the congestion which frequently follows new development is the main idea behind Transportation Development Districts (TDDs). This year saw three TDDs launched: the I-78/Route 22 Corridor in Readington and Tewksbury Townships in Hunterdon County, the Tilton Road Corridor in Egg Harbor and Northfield in Atlantic County and the I-95/295 Corridor in Hopewell, Ewing and Lawrence Townships in Mercer County.

TDDs give counties and municipalities a framework for financing and implementing local transportation improvements that result from development-generated traffic within the district. Through TDDs, developers are assessed a fair share of the cost for such improvements based on the traffic impact of their respective developments. The TDD serves

as a vehicle to accommodate growth and plan for transportation needs.

The State Highway Access Management Code was revised last year to respond to citizen requests with an eye to safeguarding highway capacity. The access code will be re-proposed in 1991. Hearings on the revisions will be held with spring 1991 targeted for adoption of the final regulations.

The Department received more than 630 different comments from the five hearings held this spring. Since then NJDOT planners met with individuals, corporate representatives and technical experts to obtain suggestions and comments on the draft regulations. Information derived from these meetings will produce significant changes to the original draft regulations.

New Jersey's access code is one of only a handful nationwide and is more comprehensive than those being prepared elsewhere. The regulations created as a result of the Department's interaction with the private sector will provide a reasonable, responsive code to guide development along state highways and preserve our mobility in the years ahead.

Connecting transportation modes

New Jersey and two railroad companies shared the costs of building two facilities to transfer shipments from rail cars to trucks, enabling the companies to benefit from long-haul rates and pass on savings to consumers and make New

Finding better ways to decrease congestion like this on Route 73 in Evesham Township, Burlington County, is a priority.



Jersey industries more competitive. The Black River & Western Railroad bulk transfer station, located in Ringoes, Hunterdon County, cost \$45,000 and the New York, Susquehanna and Western Railroad container facility in Secaucus, Hudson County, cost \$414,000.

Clean Air and other environment issues

The message in this year's Transportation Executive Council recommendations is clear: New Jersey's transportation investments must be compatible with its goals for environmental quality and the general quality of life for citizens. Solutions are not always simple or quick. Not completing a transportation project to protect one facet of the environment may harm the environment in another way. For example, continued congestion can cause the deterioration of air quality.

The Department must comply with the November 15 amendments to the federal Clean Air Act which requires states in violation of air quality standards to develop new State Implementation Plans for improving air quality. While the Department of Environmental Protection (DEP) is responsible for developing the plan for stationary sources, NJDOT is in charge of mobile sources. This year an initial set of strategies was established to develop transportation control measures to reduce the rate of growth in vehicle miles of travel in New Jersey and to manage travel demand by shifting travel out of peak travel periods.

In a related program, Department staff is working with DEP and a consultant to develop a public consensus for clean air strategies. In 1990 Project Clean Air, a coalition of state agencies and private groups, disseminated informational materials, held seminars, co-sponsored an Eagleton public opinion poll and an audience participation program on public television in November called "Air Aid."

NJ TRANSIT moved ahead with an alternative fuels demonstration project this year that will test two approaches—compressed natural gas and trap oxidizers—to meet the more exacting emission standards mandated by the amendments to the federal Clean Air Act. Compressed natural gas is an alternate fuel and trap oxidizers act like the catalytic converters in automobiles. In partnership with Public Service Electric and Gas Company, NJ TRANSIT will test five buses fueled by compressed natural gas in 1991.

NJ TRANSIT used \$31 million from the Transportation Trust Fund to continue environmental compliance programs, such as the removal of old fuel tanks at bus and rail facilities; purchase of operations support equipment and vehicles which are used to service the bus fleet and rail infrastructure; and improvements to rail crew quarters, rail yards and bus maintenance and support facilities.

This year NJDOT created a new category of projects which saves time by

New Jersey's transportation investments must be compatible with its goals for environmental quality and the general quality of life for citizens.

NJDOT breaks new ground in recycling

The Department continues to break new ground in its recycling efforts. Research into the reuse of waste products, such as coal fly ash, old tires and glass in road construction projects has already yielded positive results and kept hundreds of tons of these materials out of rapidly shrinking landfills.

"Glassphalt," a blend of crushed glass and recycled asphalt, is being tested by the Department as a substitute aggregate. If current test sites prove the material a success, its

use can be expanded. As a substitute aggregate, glassphalt reuses 120 tons of glass per mile.

NJDOT is a national leader in the recycling of old asphalt, using an average of about 50,000 tons annually resulting in saving the state \$2 to \$3 million a year. Virtually all of the 13 million pounds of structural steel used by the NJDOT annually is derived from recycled steel. In addition, the Department uses about 15,000 tons of fly ash each year as a filler in bituminous concrete.

This year the Department launched an aggressive recycling campaign in its Headquarters offices and shops.

expediting environmental programmatic approvals from the Federal Highway Administration. Key approvals were also obtained for various phases of I-287, Routes 147, 87, 187, 1/130 overpass and County Route 522.

Environmental issues were pivotal to the selection of a location for an interchange on I-287. After a thorough study of the issues and a public meeting with community officials and local residents, Commissioner Downs announced that the Passaic County interchange would be located at Ringwood Avenue, the location covered in the already-approved Final Environmental Impact Statement for the roadway.

In addition to the availability of 100% federal funding for the Ringwood Avenue interchange, Commissioner Downs based his decision on several complex variables, such as environmental and design problems associated with the alternative site.

The Route 37 Mathis Bridge in Dover Township, Ocean County, has become an outdoor laboratory for the testing of paint that will meet new federal Environmental Protection Agency regulations which limit the amount of solvents or volatile organic compounds contained in the paint. The bridge over Barnegat Bay was selected because of its constant exposure to sun, salt water, wind and storms. The federally-funded research is being conducted with the cooperation of paint manufacturers.

The NJDOT's investment recovery program celebrated its first anniversary in April and has enriched state coffers by almost \$150,000 this year. The program

identifies recyclable material and markets for its resale. The recovered material includes equipment, materials, supplies and scrap metal ranging from typewriters and compressors to scrap iron and steel.

This year the Department launched an aggressive recycling campaign in its Headquarters offices and shops. Containers were placed throughout the complex to collect cans, bottles, office paper and newspapers. "Recycling is everyone's job" was the theme that appeared on posters and banners in every work area.

Special coordinators were designated and trained by the Department of Environmental Protection to support the program. The Region III center in Freehold already has a similar program in place. It will extend to other regions and maintenance facilities as soon as contracts with local waste recyclers can be established.

The Department routinely recovers solvents and liquid wastes from its mechanical repair shops and recycles automobile air conditioning fluids (freon and antifreeze).

This year all NJDOT publications, including the 1990-91 official state map, have converted to recycled paper.

But efforts did not end here. The Department expanded its fight against litter by inking an agreement with Ocean County officials that allows inmates at County facilities to pick up litter on state highways in the county. The NJDOT budget spent on litter pick-up continues to grow — from \$3.7 million in FY88 to \$5.5 million earmarked for FY91.

Building on excellence

Department employees take pride in the quality of services they deliver. This tradition of excellence continues with renewed dedication and innovations. In tight times, employees look for cost-saving measures and new ways to do more with less.

In 1990, while the total number of transportation employees declined from 5,636 in 1989 to 5,426 and dollars were cut, new ways were found to update, consolidate and automate. For example, the Department's procurement division underwent major reorganization, computerization and training. As a result, it processed more than 15,000 requisitions in reduced time. It will continue to work on more efficient handling of consultant services.

To prepare 1,900 employees to pass the newly-mandated test for a commercial driver's license (CDL), the Department staged one of its most extensive and intensive training projects ever. To date, more than 80% have already passed the test. The Department's CDL training program has already become a model for other states.

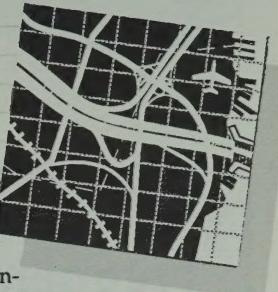
Another program developed by the Department was publicly praised by Governor Florio in November. He pointed to the sick leave for injuries (SLI) program

as a model for New Jersey state government. Over a ten-year period, the NJDOT program cut worker absences for injuries from 12,000 days in 1979 to 5,000 days in 1989.

The NJDOT has five regional medical clinics at strategic locations throughout the state. Staffed by nurses under a doctor's supervision, each facility provides emergency and follow-up medical assistance for employees who sustain job-related injuries. It is estimated that a similar program statewide could save New Jersey up to \$15 million a year.

Consolidation and cost-effectiveness are tied to delivery of services. To this end, the Department cancelled six building leases this year following the consolidation of state offices in Newark and the re-occupation of its renovated Headquarters Building in Trenton.

Following an inventory and analysis of 600 buildings at 100 locations statewide, a special study completed this year recommended a ten-year plan for more facility consolidations and immediate and long-term remedies for personal safety and building code violations. Other facility improvements and alterations were suggested to help the Department's workforce deliver planned future services more efficiently and economically.



The Governor cited the NJDOT sick leave for injury program as a model for all of state government.

Frequently requested phone numbers

Accident Records (NJDOT)	609-530-8082
Car and vanpool information (NJDOT)	800-245-POOL
Car licenses, registrations, etc.(Motor Vehicles)	800-DMV-2222
Community Information (NJDOT)	609-530-2110
Contract Specifications Manual (NJDOT)	609-530-2097
Federal Highway Administration (Region Office)	609-989-2288
Freight Services (NJDOT)	609-530-8026
Headquarters Receptionist (NJDOT)	609-530-2001
Highway Maintenance (NJDOT)	
Region 1 - Netcong	201-347-4415
Region 2 - Newark	201-648-2278
Region 3 - Freehold	908-308-4086
Region 4 - Cherry Hill	609-428-6550
Maps	
Technical (NJDOT)	609-530-2841
Highway (Travel & Tourism)	609-292-2470
Public Transportation	
Bus & Train (NJ TRANSIT)	
In Northern NJ (calls from New Jersey)	800-772-2222
From out of state	201-460-8444
In Southern NJ (calls from New Jersey)	800-582-5946
From out of state	215-569-3752
Customer Services (NJ TRANSIT)	
In New Jersey	800-772-3606
From out of state	201-935-2500
Traffic Engineering (NJDOT)	609-530-2627
US Department of Transportation (USDOT)	202-366-4000

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